

**7<sup>th</sup> Indian Conference on Applied Mechanics (INCAM 2026)**  
**Indian Institute of Technology Kanpur**  
**9-11 July 2026**

**PROGRAM SCHEDULE**

Time	DAY 1, Thursday (9 July 2026)	
09:00 - 9:30	Inaugural Ceremony (Venue: L18, Lecture Hall Complex)	
09:30 - 10:15	<b>Plenary Lecture 1: Alwar Memorial Lecture – Prof. R. Narasimhan</b> (Venue: L18, Lecture Hall Complex) Title: Mechanics of fracture of basal-textured magnesium alloys: Experiments and finite element modelling	
10:15 - 10:45	Photo Session and Tea Break (L18 Foyer)	
10:45 – 13:15	Parallel sessions	
	<b>Mini-symposium – Advances in Computational Solid Mechanics</b> Venue: L18, Lecture Hall Complex	Invited Lecture by <b>Prof. Srikanth Vedantam, IIT Madras</b> Title: Constitutively informed particle dynamics: A novel discrete particle modelling approach
		Paper IDs: 13, 15, 17, 23, 27, 30, 36, 81
	<b>Mini-symposium - AI and HPC for Applied Mechanics</b> Venue: L8, Lecture Hall Complex	Invited Lecture by <b>Prof. Rishita Das, IISc Bangalore</b> Title: Machine learning for turbulent flows: From super-resolution to extreme events prediction
		Paper IDs: 11, 41, 59, 109, 117, 126, 139, 152
	<b>Mini-symposium - Fatigue and Fracture</b> Venue: L9, Lecture Hall Complex	Invited Lecture by <b>Prof. Gaurav Singh, IIT Delhi</b> Title: State of stress in the crack-tip region: Theory, experiments and simulations  Paper IDs: 4, 22, 63, 65, 69, 74, 77, 78

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	<b>Mini-symposium – Mechanics in Bio-applications and Sports</b> Venue: L12, Lecture Hall Complex	Invited Lecture by <b>Prof. Jaywant Arakeri, IISc Bengaluru</b> Title: Fluid mechanics of fish-like locomotion	
		Paper IDs: 33, 35, 43, 49, 50, 52, 53, 61	
	<b>Mini-symposium – Design of Engineering Structures</b> Venue: L13, Lecture Hall Complex	Invited Lecture by <b>Prof. Devesh Punera, IIT Bhubaneswar</b> Title: Manufacturing defect-dependent modelling of variable angle tow composites using refined structural models	
		Paper IDs: 294 (S01), 25, 93, 122, 142, 197, 234 S01: Sponsors talk from Pyrodynamics	
	<b>Mini-symposium – Mechanics of Soft and Biological Matter</b> Venue: TB 110, Tutorial Block	Invited Lecture by <b>Prof. Sumit Basu, IIT Kanpur</b> Title: Surface stresses in ultra-soft solids	
		Invited Lecture by <b>Prof. Krishna Kannan, IIT Madras</b> Title: A first-principles chemo-mechanical framework for smooth muscle contraction: From cellular kinetics to organ-level response	
		Paper IDs: 44, 57, 133, 158, 169, 172	
	<b>Mini-symposium – Mechanics of Composite Materials</b> Venue: TB 111, Tutorial Block	Invited Lecture by <b>Prof. C. S. Upadhyay, IIT Kanpur</b> Title: The dawning age of plant-based composites: From waste to structure	
		Paper IDs: 7, 14, 76, 79, 98, 102, 134, 150	
	13:15 - 14:30	<b>Lunch Break (Main Auditorium Lawn)</b>	
	14:30 - 16:15	Parallel sessions	
		<b>Mini-symposium - Plasticity and Creep</b> Venue: L18, Lecture Hall Complex	Invited Lecture by <b>Prof. Praveen Kumar, IISc Bangalore</b> Title: Length scale effects on power law creep of materials: Cases of uniform and graded stress fields
Paper IDs: 64, 105, 115, 143, 155, 176			

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	<b>Mini-symposium - AI and HPC for Applied Mechanics</b> Venue: L8, Lecture Hall Complex	Invited Lecture by <b>Prof. Vadlamani Nagabhushana Rao, IIT Madras</b> Title: High-fidelity turbulence simulation towards exascale: Methods, case studies, and HPC strategies	
		Paper IDs: 164, 171, 289, 317, 334	
	<b>Mini-symposium - Fatigue and Fracture</b> Venue: L9, Lecture Hall Complex	Invited Lecture by <b>Prof. Anirban Patra, IIT Bombay</b> Title: Crystal plasticity modeling of cyclic deformation in polycrystalline Ni-based superalloys	
		Paper IDs: 83, 87, 103, 124, 127	
	<b>Mini-symposium – Mechanics in Bio-applications and Sports</b> Venue: L12, Lecture Hall Complex	Invited Lecture by <b>Prof. Sanjay Mittal, IIT Kanpur</b> Title: Sports aerodynamics: Cricket, badminton, frisbee	
		Paper IDs: 68, 71, 72, 107, 131	
	<b>Mini-symposium – Design of Engineering Structures</b> Venue: L13, Lecture Hall Complex	Invited Lecture by <b>Prof. Kaustubh Dasgupta, IIT Guwahati</b> Title: Seismic design philosophy of RC wall-frame buildings with the role of floor slabs	
		Paper IDs: 251, 257, 290, 323, 341	
	<b>Mini-symposium – Mechanics of Soft and Biological Matter</b> Venue: TB 110, Tutorial Block	Invited Lecture by <b>Prof. Viswanath Chinthapenta, IIT Hyderabad</b> Title: Investigation of sutures and sutureability in ophthalmology	
		Paper IDs: 371, 205, 221, 225, 242	
	<b>Mini-symposium – Fluid-Structure Interaction</b> Venue: TB 111, Tutorial Block	Invited Lecture by <b>Prof. Sanjay Kumar, IIT Kanpur</b> Title: Vortex shedding onset behind a circular cylinder in soap film flows	
		Paper IDs: 55, 151, 209, 212, 219	
	16:15 -16:30	Tea Break (L18 Foyer)	
	16:30 - 18:30	Parallel sessions	
<b>Mini-symposium – Advances in Computational Solid Mechanics</b>		Invited Lecture by <b>Prof. Venkatraman Pandurangan, IIT Tirupati</b>	

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	Venue: L18, Lecture Hall Complex	Title: From data to physics: Machine learning in computational solid mechanics
		Paper IDs: 146, 175, 178, 180, 196, 239
	<b>Mini-symposium – Advances in Computational Fluid Dynamics</b> Venue: L8, Lecture Hall Complex	Invited Lecture by <b>Prof. Harshal Akolekar, IIT Jodhpur</b> Title: Scientific machine learning for turbulence and transition modelling applications to gas turbine flows
		Paper IDs: S02, 110, 170, 210, 211, 217 S02: Sponsors talk from CADFEM
	<b>Mini-symposium – Contact Adhesion &amp; Friction</b> Venue: L9, Lecture Hall Complex	Invited Lecture by <b>Dr Ramkumar Penchaliah, IIT Madras</b> Title: Systematic approach for contact mechanics-based FEM wear simulation Invited Lecture by <b>Prof. Gopakumar Parameswaran, BP Mumbai</b> Title: A transient friction rig for differentiating engine lubricant performance at the high-pressure fuel pump roller-follower
		Paper IDs: 38, 119, 160, 262
	<b>Mini-symposium – Mechanics of Composite Materials</b> Venue: L12, Lecture Hall Complex	Paper IDs: 154, 162, 182, 183, 244, 255, 269, 274
	<b>Mini-symposium – Mechanics for Sustainability</b> Venue: L13, Lecture Hall Complex	Invited Lecture by <b>Prof. C. Chandraprakash, IIT Kanpur</b> Title: Biodegradable soft materials for sound absorption Paper IDs: 92, 184, 187
	<b>Mini-symposium – Undergraduate Research Program (URP)</b> Venue: TB 110, Tutorial Block	Paper IDs: 114, 179, 253, 318, 363, 367, 368
	<b>Mini-symposium – Fluid-Structure Interaction</b> Venue: TB 111, Tutorial Block	Invited Lecture by <b>Prof. Prasad Patnaik, IIT Madras</b>

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		Title: Fluid-structure interaction: Cerebrovascular disease simulations for patient specific management
		Paper IDs: 220, 230, 238, 286, 325, 349
18:30 - 19:30	AGM (L18, Lecture Hall Complex)	
19:30	Dinner (Main Auditorium Lawn)	

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Time	DAY 2, Friday (10 July 2026)	
09:00 - 09:45	<b>Plenary Lecture 2: Prof L S Srinath Memorial Lecture - Prof. Jayant Sirohi</b> (Venue: L18, Lecture Hall Complex) Title: Harvesting energy from aeroelastic instabilities	
09:45 - 10:15	Tea Break (L18 Foyer)	
10:15 – 12:45	Parallel sessions	
	<b>Mini-symposium – Advances in Computational Solid Mechanics</b> Venue: L18, Lecture Hall Complex	Paper IDs: 268, 314, 315, 347, 352
	<b>Mini-symposium – Advances in Computational Fluid Dynamics</b> Venue: L8, Lecture Hall Complex	Invited Lecture by <b>Prof. Ratnesh Shukla, IISc Bangalore</b> Title: Adaptive-order unstructured methods for shock-driven flows
		Invited Lecture by <b>Prof. Ashwani Assam, IIT Patna</b> Title: Algorithmic advances in shock-resolving methods for compressible flow simulations
	Paper IDs: 226, 228, 232, 291, 324, 336	
	<b>Mini-symposium - Fatigue and Fracture</b> Venue: L9, Lecture Hall Complex	Invited Lecture by <b>Prof. Indra Vir Singh, IIT Roorkee</b> Title: A numerical framework based on CDM to evaluate the fatigue life of laminated composites
		Paper IDs: 194, 216, 218, 247, 293, 332, 346
<b>Mini-symposium – Mechanics of Composite Materials</b> Venue: L12, Lecture Hall Complex	Invited Lecture by <b>Prof. Suresh Kumar, DMSRDE</b> Title: C/SiC Composites for Thermo-structural Applications: Achievements, Mechanics Challenges and Development Methodology Paper IDs: 278, 280, 281, 304, 307, 340, 359, 370, 375	
<b>Mini-symposium -Geomechanics and Planetary Science</b> Venue: L13, Lecture Hall Complex	Invited Lecture by <b>Prof. Manash Chakraborty, IIT (BHU) Varanasi</b> Title: Seepage and consolidation flow through unsaturated soil	
Invited Lecture by <b>Prof. Satyajit Pramanik, IIT Guwahati</b>		

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		Title: Deformation-driven mixing in a soft porous medium
		Paper IDs: 70, 82, 111, 113, 157, 259, 266, 282
	<b>Mini-symposium – Numerical Simulations for Static and Dynamic Studies</b> Venue: TB 110, Tutorial Block	Invited Lecture by <b>Prof. S.K. Panda, IIT (BHU) Varanasi</b> Title: Dynamic fracture behavior of nuclear graphite
		Paper IDs: 19, 21, 24, 46, 48, 54, 86, 136
	<b>Mini-symposium – Mechanics of Smart Materials and Structures</b> Venue: TB 111, Tutorial Block	Invited Lecture by <b>Prof. Shaikh Faruque Ali, IIT Madras</b> Title: Mechanics of energy harvesters
		Paper IDs: 10, 20, 42, 91, 132, 156, 163, 177
12:45 - 14:00	Lunch Break (Main Auditorium Lawn)	
	Parallel sessions	
	<b>Mini-symposium - Plasticity and Creep</b> Venue: L18, Lecture Hall Complex	Invited Lecture by <b>Prof. Shyam Keralavarma, IIT Madras</b> Title: Mechanics of plastic instability in thermo-viscoplastic solids
		Invited Lecture by <b>Prof. P. J. Guruprasad, IIT Bombay</b> Title: Dislocation mean free path and grain size effects in creep plasticity of polycrystalline metals
14:00 - 16:00		Paper IDs: 271, 273, 276, 285
	<b>Mini-symposium - AI and HPC for Applied Mechanics</b> Venue: L8, Lecture Hall Complex	Invited Lecture by <b>Prof. Souvik Chakraborty, IIT Delhi</b> Title: See, hypothesize, discover: Agentic AI for scientific discovery
		Paper IDs: 360, 361, 369, 373
	<b>Mini-symposium – Contact Adhesion &amp; Friction</b>	Invited Lecture by <b>Prof. Nitya Nand Gosvami, IIT Delhi</b>

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	Venue: L9, Lecture Hall Complex	Title: Anisotropic frictional characteristics of bioinspired nanopatterned surfaces
		Paper IDs: 264, 267, 277, 279, 305, 309
	<b>Mini-symposium - Mechanics in Bio-applications and Sports</b> Venue: L12, Lecture Hall Complex	Paper IDs: 229, 235, 246, 248, 321, 335, 353, 355
	<b>Mini-symposium - Design of Engineering Structures</b> Venue: L13, Lecture Hall Complex	Invited Lecture by <b>Prof. Avik Samanta, IIT Patna</b> Title: Behavior of class-4 steel beams with opening
		Paper IDs: 342, 350, 364, 125
	<b>Mini-symposium – Numerical Simulations for Static and Dynamic Studies</b> Venue: TB 110, Tutorial Block	Invited Lecture by <b>Prof. B. Venkataraman, Amrita Vishwa Vidyapeetham</b> Title: Mechanics of static and dynamic indentation and its relevance in engineering application
		Paper IDs: 144, 165, 189, 207, 326, 327, 366, 372
	<b>Mini-symposium - Mechanics of Highly Deformable Bodies &amp; Materials</b> Venue: TB 111, Tutorial Block	Invited Lecture by <b>Prof. M. S. Bobji, IISc Bengaluru</b> Title: Controlled cone crack formation in hydrogels during needle insertion: Influence of network structure
		Invited Lecture by <b>Prof. Akshay Joshi, IISc Bengaluru</b> Title: Hetero-EUCLID: Interpretable model discovery for heterogeneous hyperelastic materials using stress-supervised learning
		Paper IDs: 34, 145, 153, 287
16:00 -16:30	Tea Break (L18 Foyer)	

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16:30 - 18:30	<b>Mini-symposium - Plasticity and Creep</b> Venue: L18, Lecture Hall Complex	Invited Lecture by <b>Prof. Ilaksh Adlakha, IIT Madras</b> Title: Effect of hydrogen on plasticity of $\alpha$ -Fe: a multi-scale assessment  Paper IDs: 322, 356, 358
	<b>Mini-symposium - Turbulent and Complex Flows</b> Venue: L8, Lecture Hall Complex	Invited Lecture by <b>Prof. Aniruddha Sinha, IIT Bombay</b> Title: Modelling non-axisymmetric jet noise  Paper IDs: 80, 88, 104, 116, 118
	<b>Mini-symposium – Contact Adhesion &amp; Friction</b> Venue: L9, Lecture Hall Complex	Paper IDs: 311, 362, 374, 376, 377
	<b>Mini-symposium - Mechanics in Bio-applications and Sports</b> Venue: L12, Lecture Hall Complex	Paper IDs: 357, 365
	<b>Mini-symposium - Mechanics of Smart Materials and Structures</b> Venue: L13, Lecture Hall Complex	Paper IDs: 193, 200, 204, 233, 243, 250, 261
	<b>Mini-symposium - Mechanics of Soft and Biological Matter</b> Venue: TB 110, Tutorial Block	Paper IDs: 256, 295, 306, 319
	18:30 – 19:30	Cultural Program (Outreach Auditorium)
19:30	Gala Dinner (Main Auditorium Lawn)	

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Time	DAY 3, Saturday (11 July 2026)	
09:00 - 09:45	<b>Plenary Lecture 3: Karunakaran Memorial Lecture - Prof. Ravindra Adusumilli</b> (Venue: L18, Lecture Hall Complex) Title: When development devours people: A critique of S&T competency in grassroots solutioning	
09:45 - 10:15	Tea Break (L18 Foyer)	
10:15 – 12:45	Parallel sessions	
	<b>Mini-symposium – Ayurveda</b> Venue: L18, Lecture Hall Complex	Invited lecture by <b>Prof. V Srinivas Chackravathy, IIT Madras</b> Title: Rethinking the tridosha theory of Ayurveda: A biothermodynamic perspective
	Paper IDs: 60, 224, 283	
	<b>Mini-symposium – Turbulent and Complex Flows</b> Venue: L8, Lecture Hall Complex	Invited Lecture by <b>Prof. Somnath Roy, IIT Kharagpur</b> Title: Flow features over bileaflet mechanical heart valves
	Paper IDs: 215, 223, 297, 302, 313, 338, 339, 345	
	<b>Mini-symposium – Mechanics of Smart Materials and Structures</b> Venue: L9, Lecture Hall Complex	Invited Lecture by <b>Prof. Bishakh Bhattacharya, IIT Kanpur</b> Title: Evolution of intelligent autonomous system based on smart materials
	Paper IDs: 292, 328	
	<b>Mini-symposium – Extreme Mechanics</b> Venue: L12, Lecture Hall Complex	Invited Lecture by <b>Prof. Dhiraj K. Mahajan, IIT Ropar</b> Title: Understanding the interplay of multiple mechanisms of hydrogen embrittlement using experiments and simulations
Paper IDs: 62, 85, 90, 99, 108, 138, 174, 181		
12:45 - 14:00	Lunch Break (Main Auditorium Lawn)	
14:00 - 16:00	Parallel sessions	

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	<p style="text-align: center;"><b>Mini-symposium – Ayurveda</b>  Venue: L18, Lecture Hall Complex</p>	<p style="text-align: center;">Paper IDs: Titles</p> <p style="text-align: center;">Invited Lecture by <b>Dr. GRR Chakravarthy, SJSACH, Chennai</b>  Title: Yukti Vyapāśraya: Scientific characterisation of rational therapeutics</p> <p style="text-align: center;">Invited Lecture by <b>Dr Rishi Manivannan, Director, Vaidyarishi Ayurveda</b>  Title: Daivavyapasraya chikitsa – Unmada &amp; Apasmara: wrt autism spectrum disorder</p> <p style="text-align: center;">Invited Lecture by <b>Prof Shripathi Acharya, Muniyal Institute of Ayurveda Medical Sciences</b>  Title: Role of daiva vyapashraya chikitsa in the management of autism</p> <p style="text-align: center;">Invited Lecture by <b>Dr. P. K. Partheeban, Swabhimaan Trust – Holistic Solutions for Autism</b>  Title: Bridging neurodiversity, tradition, and technology</p>
	<p style="text-align: center;"><b>Mini-symposium - Geomechanics and Planetary Science</b>  Venue: L8, Lecture Hall Complex</p>	<p style="text-align: center;">Paper IDs:</p>
	<p style="text-align: center;"><b>Mini-symposium - Mechanics of Highly Deformable Bodies &amp; Materials</b>  Venue: L9, Lecture Hall Complex</p>	<p style="text-align: center;">Invited Lecture by <b>Prof. Abir Bhattacharyya, IIT Jodhpur</b>  Title: Elastic modulus and strain-dependent lateral to axial strain ratio in semi-dilute polyacrylamide hydrogels</p> <p style="text-align: center;">Paper IDs: 301, 312</p>
	<p style="text-align: center;"><b>Mini-symposium – Extreme Mechanics</b>  Venue: L12, Lecture Hall Complex</p>	<p style="text-align: center;">Invited Lecture by <b>Prof. Ganpule Shailesh Govind, IIT Roorkee</b>  Title: Biomechanical analysis of surrogate head forms equipped with ballistic helmets under high velocity bullet impact</p>

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		Paper IDs: 260, 272, 337, 344
	Tea Break (L18 Foyer)	
16:15 -16:30	Valedictory Function	